



**REISSUE APPLICATION
DECLARATION BY THE INVENTOR**

Docket Number

251496US90RE

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original first and joint inventor (if plural names are listed below) of the subject matter which is described and claimed in the below identified patent:

Patent Number

6,376,049 B1

Date Patent Issued

April 23, 2002

Title of Invention

MULTILAYER PRINTED WIRING BOARD AND ITS MANUFACTURING METHOD, AND RESIN COMPOSITION FOR FILLING THROUGH-HOLE

for which a reissue patent is sought on the invention entitled:

MULTILAYER PRINTED WIRING BOARD AND ITS MANUFACTURING METHOD, AND RESIN COMPOSITION FOR FILLING THROUGH-HOLE

the specification of which

☒ is attached hereto

☐ was filed on _____ as reissue application number _____

☐ and (if applicable) was amended on _____

I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

We (I) hereby claim foreign priority benefits under 35 USC §119(a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate, or §365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below any foreign application for patent or inventor's certificate, or PCT international application having a filing date before that of the application on which priority is claimed. Prior Foreign Application(s):

<u>Application No.</u>	<u>Country</u>	<u>Day/Month/Year</u>	<u>Priority Claimed</u>
9-280499	Japan	14/OCTOBER/1997	YES
9-340180	Japan	10/DECEMBER/1997	YES
9-340182	Japan	10/DECEMBER/1997	YES
10-067065	Japan	17/MARCH/1998	YES

We (I) hereby claim the benefit under 35 USC §119(e) of any United States *provisional* application(s) listed below.

Application Number

Filing Date

We (I) hereby claim the benefit under 35 USC §120 of any United States application(s), or §365I of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 USC §112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR §1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

Application Serial No.

Filing Date

Status

09/341,689

23/JULY/1999

Patented

I verily believe the original patent to be wholly or partly inoperative or invalid, for the reasons described below. (Check all that apply)

☐ by reason of a defective specification or drawing.

☒ by reason of the patentee claiming more or less than he had the right to claim in the patent.

☐ by reason of other errors.

At least one error upon which reissue is based is described as follows:

Failure to include new Claim 87 substantially corresponding to original patent claim 1, but instead of reciting that the filler comprises metal particles and one of thermosetting and thermoplastic resin, reciting that said at least one via hole is connected to said through-hole-covering conductor layer.

All errors corrected in this reissue application arose without any deceptive intention on the part of the applicant.

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected herewith:

Customer Number

22850

Correspondence Address:

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C.

1940 Duke Street

Alexandria, Virginia 22314.

Telephone: (703) 413-3000

Facsimile: (703) 413-2220

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine and imprisonment, or both, under 18 U.S.C. 1001, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this declaration is directed.

Full Name of sole or first inventor (given name, family name)

Motoo ASAI

Signature

Motoo Asai

Date

5/19/04

Residence

Gifu, Japan

Citizenship

Japan

Post Office Address c/o IBIDEN CO., LTD., 1-1 Kitagata, Ibigawacho, Ibi-gun, Gifu 501-0601, Japan

Full Name of second joint inventor (given name, family name)

Kenichi-SHIMADA

Signature

Ken-ichi Shimada

Date

5/19/04

Residence

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Citizenship

Japan

Post Office Address c/o IBIDEN CO., LTD., 1-1 Kitagata, Ibigawacho, Ibi-gun, Gifu 501-0601, Japan

Full Name of third joint inventor (given name, family name)

Kouta NODA

Signature

Kouta Noda

Date

5/19/04

Residence

Gifu, Japan

Citizenship

Japan

Post Office Address c/o IBIDEN CO., LTD., 1-1 Kitagata, Ibigawacho, Ibi-gun, Gifu 501-0601, Japan

☒ Additional joint inventors are named on separately numbered sheets attached hereto.

Reissue Application Declaration by the Inventor (Continued)

Full Name of forth joint inventor (given name, family name) Takashi KARIYA	
Signature Takashi Kariya	Date 5/19/04
Residence Gifu, JAPAN H:\25s\251496RE\REISSUE_DEC.DOC	Citizenship Japan
Post Office Address c/o IBIDEN CO., LTD., 1-1 Kitagata, Ibigawacho, Ibi-gun, Gifu 501-0601, Japan	
Full Name of fifth joint inventor (given name, family name) Hiroshi SEGAWA	
Signature Hiroshi Segawa	Date 5/21/04
Residence Gifu, Japan	Citizenship Japan
Post Office Address c/o IBIDEN CO., LTD., 1-1 Kitagata, Ibigawacho, Ibi-gun, Gifu 501-0601, Japan	

(OSMMN 03/02)

STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Motoo ASAI, et al.

Application No./Patent No.: 6,376,049 B1

Filed/Issue Date: April 23, 2002

MULTILAYER PRINTED WIRING BOARD AND ITS MANUFACTURING METHOD, AND RESIN
Entitled: COMPOSITION FOR FILLING THROUGH-HOLE

Ibiden Co., Ltd., a Corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, government agency, etc.)

States that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.
The extent (by, percentage) of its ownership interest is _____%

in the patent application/patent identified above by virtue of either:

- A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 010176/0334, Frame 0334, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

2. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, or for which a copy thereof is attached.

3. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☒ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

5/26/2004
Date

Yoshifumi IWATA

Typed or printed name

Yoshifumi Iwata
Signature

President

Title

ASSIGNMENT

WHEREAS, **Motoo ASAI**, a citizen of Japan, whose post office address is c/o IBIDEN Co., Ltd., 1-1, Kitakata, Ibigawa-cho, Ibi-gun, Gifu 501-0601, Japan, **Kenichi SHIMADA**, a citizen of Japan, whose post office address is c/o IBIDEN Co., Ltd., 1-1, Kitakata, Ibigawa-cho, Ibi-gun, Gifu 501-0601, Japan, **Kouta NODA**, a citizen of Japan, whose post office address is c/o IBIDEN Co., Ltd., 1-1, Kitakata, Ibigawa-cho, Ibi-gun, Gifu 501-0601 Japan, **Takashi KARIYA**, a citizen of Japan, whose post office address is c/o IBIDEN Co., Ltd., 1-1, Kitakata, Ibigawa-cho, Ibi-gun, Gifu 501-0601, Japan, and **Hiroshi SEGAWA**, a citizen of Japan, whose post office address is c/o IBIDEN Co., Ltd., 1-1, Kitakata, Ibigawa-cho, Ibi-gun, Gifu 501-0601, Japan, hereinafter referred to as the ASSIGNORS, have invented a certain improvement relating to

MULTILAYER PRINTED WIRING BOARD AND ITS PRODUCTION
PROCESS, RESIN COMPOSITION FOR FILLING THROUGH-HOLE

for which they have, on the dates indicated below, executed an application for Letters Patent of the United States to be filed in the United States Patent and Trademark Office, which is a National Stage Application of International Application No. PCT/JP98/04584, filed October 12, 1998.

AND WHEREAS, IBIDEN Co., Ltd., a corporation organized and existing under the laws of Japan, whose post-office address is 1, Kanda-cho 2-chome, Ogaki-shi, Gifu 503-0917, Japan, hereinafter known as the ASSIGNEE, is desirous of acquiring the entire right, title and interest for the United States in and to said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues, and prolongations thereof.

NOW, THIS WITNESSETH that for and in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt whereof is hereby acknowledged, said ASSIGNORS hereby assign, sell and transfer to said ASSIGNEE, its assigns and legal representatives, the entire and exclusive right, title and interest in and to said invention and application, for the United States including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted therefor, said ASSIGNEE and its assigns and legal representatives to have, hold, exercise and enjoy the said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges, and advantages in any ways arising from or pertaining thereto, for and during the term or terms of any and all such Letters Patent when granted, including any and all renewals, reissues, and prolongations thereof, for the use and benefit of said ASSIGNEE and its assigns and legal representatives in as ample and beneficial a manner to all intents and purposes as the said ASSIGNORS might or could have held and enjoyed the same, if this assignment had not been made.

AND said ASSIGNORS hereby agree to execute all papers necessary to file applications in the United States for said invention and to assign the same to said ASSIGNEE, or any assignee

acquiring title to said invention, and to execute any other papers that may be needed in connection with filing said application and securing Letters Patent thereon.

AND said ASSIGNORS authorize and request the Commissioner of Patents to issue Letters Patent on said application, and on any and all divisions and continuations thereof, to said ASSIGNEE, its assigns and legal representatives, in accordance herewith.

IN TESTIMONY WHEREOF, this assignment is executed by said ASSIGNORS, on the respective dates indicated below.

Witnessed by:

Tsunehiro Kohara 02/July/99
Name Date
Tsunehiro KOHARA

Motoo Asai 01/July/99
Motoo ASAI Date

Tomohiro Nishikawa 02/July/99
Name Date
Tomohiro NISHIKAWA

Witnessed by:

Tsunehiro Kohara 02/July/99
Name Date
Tsunehiro KOHARA

Ken-ichi Shimada 01/July/99
Kenichi SHIMADA Date

Tomohiro Nishikawa 02/July/99
Name Date
Tomohiro NISHIKAWA

Witnessed by:

Tsunehiro Kohara 02/July/99
Name Date
Tsunehiro KOHARA

Kouta Noda
Kouta NODA

01/July/99
Date

Tomohiro Nishikawa 02/July/99
Name Date
Tomohiro NISHIKAWA

Witnessed by:

Tsunehiro Kohara 02/July/99
Name Date
Tsunehiro KOHARA

Takashi Kariya
Takashi KARIYA

01/July/99
Date

Tomohiro Nishikawa 02/July/99
Name Date
Tomohiro NISHIKAWA

Witnessed by:

Tsunehiro Kohara 02/July/99
Name Date
Tsunehiro KOHARA

Hiroshi Segawa
Hiroshi SEGAWA

01/July/99
Date

Tomohiro Nishikawa 02/July/99
Name Date
Tomohiro NISHIKAWA